# THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

VOLUME XLIX JANUARY 1955 NUMBER 1

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2. The collection, classification, study and publication of reports dealing with the above phenomena. Readers are asked to report incidents and cases. Names must be given, but on request will be treated as confidential.

3. The maintenance of a library on psychical research and related subjects. Contributions of books and periodical files will be welcomed.

4. Cooperating in the above tasks with qualified individuals and groups who will report their work to the Society.

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## Notice of Annual Meeting of the Voting Members of the American Society for Psychical Research, Inc.

The Annual Meeting of the Voting Members of the American Society for Psychical Research, Inc., will be held at the office of the Society, 880 Fifth Avenue, Suite 1A, Borough of Manhattan, City of New York, on Tuesday, January 25, 1955, at 4:00 o'clock in the afternoon, for the election of five Trustees and for the transaction of such other business as may properly come before the meeting.

Lydia W. Allison, *Secretary*

### Voting Members of the Society

*California*: Professor B. A. G. Fuller; *Canada*: Mrs. Peggy Jacobsen; *Colorado*: Dr. Jule Eisenbud; *Connecticut*: Mr. H. Addington Bruce, Mr. Edward Latham; *Delaware*: Mr. Herbert L. Cobin; *Illinois*: Mrs. Richard L. Kennedy, Jr.; *Kansas*: Professor Gardner Murphy; *Massachusetts*: Mrs. David H. Hale, Miss Constance Worcester; *Michigan*: Mr. Edmond P. Gibson; *New Jersey*: Miss Gertrude Ogden Tubby; *New York City*: Mrs. E. W. Allison, Mrs. Valentine Bennett, Dr. Jan Ehrenwald, Mr. Samuel Fischer, Dr.

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## Lectures

Monday Evening, February 7, 1955, at 8:15

Dr. Gardner Murphy, Chairman
of the Research Committee of the Society, will address the members

on

"Plans for Research on Spontaneous Cases"

at

The National Republican Club for Women
3 West 51st Street

Other lecturers during the current season will be Professor C. J. Ducasse, of Brown University, and Dr. Jan Ehrenwald, Chairman of the Society's Medical Section. Full details of these lectures have not been completed, but members will receive notice well in advance of each lecture on the Society's schedule.

# The Feeling of Success in ESP[1]

BETTY M. HUMPHREY AND J. FRASER NICOL

Conviction of the reality of a psychic experience is often made evident by virtue of some specific action taken by the percipient as a result of the experience. Among the spontaneous cases that have been corroborated by independent testimony, there is a number in which the conviction that the experience is real, in the sense of representing genuine knowledge, is well attested by the percipient's response.

In the Chaffin Will Case (10), Mr. James Pinkney Chaffin dreamed of his deceased father appearing to him dressed in a black overcoat and saying "You will find my will in my overcoat pocket." In a sworn statement made at a later date, Mr. Chaffin affirmed, "The next morning I arose *fully convinced* that my father's spirit had visited me for the purpose of explaining some mistake" (italics ours). Whether the dream involved a "spirit" need not concern us; what is significant is that the experience represented real knowledge. Mr. Chaffin took action accordingly. The coat contained not the will but the directions for the discovery of it in an old Bible. This will was upheld in court and a previously probated will was cancelled by court order.

In another case Mrs. Jeanie Gwynne-Bettany reported an experience of her childhood, fairly well authenticated as such cases go (5, vol. 1, pp. 194-195):

> "I was walking in a country lane at A., the place where my parents then resided. I was reading geometry as I walked along . . . when, in a moment, I saw a bedroom known as the White

[1] The greater part of the data in this report was obtained in the course of a research project conducted by us with the support of a grant from the Parapsychology Foundation, New York. The assessment of most of the results and the preparation of the report were carried out under the same auspices, and to the Foundation we are glad to express our appreciation. It is a special pleasure to acknowledge that but for the support and personal encouragement of Mrs. Eileen J. Garrett, the Foundation's President, the second, crucial experiment would not have been done.

The 1952 portion of the data was collected while we were research associates of the Parapsychology Laboratory, Duke University, and the research at that stage was supported in part by the Rockefeller Foundation. The assessment of the results, together with the work of our earlier report on ESP and personality relations, was carried through with the support of a grant from the American Society for Psychical Research.

We are glad to acknowledge the advice and constructive criticism we have received from Dr. Gardner Murphy in the course of the research and in the preparation of this paper. Mrs. Laura Abbott Dale has also helped to clarify a number of difficult points in the paper. Our special thanks to Mrs. E. W. Allison for her kind cooperation throughout the research. (The facts and conclusions are of course those of the authors.)

> Room in my home, and upon the floor lay my mother, to all appearance dead. . . .
>
> "I could not doubt that what I had seen was real, so, instead of going home, I went at once to the house of our medical man. . . . He at once set out with me for my home, on the way putting questions I could not answer, as my mother was to all appearance well when I left home.
>
> "I led the doctor straight to the White Room, where we found my mother actually lying as in my vision. . . . She had been seized suddenly by an attack at the heart. . . ."

*"I could not doubt that what I had seen was real."* This feeling of having acquired real knowledge and the *subsequent action* to test its truth, is substantially the theme of the present paper. But now we transfer the scene of events from the Carolina bedroom and the English country lane to the simplified conditions of the laboratory. At the conclusion it will be seen that the spontaneous and experimental feelings of the successful acquisition of knowledge have much in common.

A belief current in psychical research is that the percipient in ESP card-calling or similar experiments does not know whether his guesses are right or wrong. Thus, Mr. Aldous Huxley in one of his most significant works (6, p. 72) has said, "To those . . . who undergo tests for ESP, or prevision, there is no perceptible distinction between success and failure. The process of guessing *feels* exactly the same, whether the result be a score attributable to mere chance, or markedly above or below that figure." Dr. J. B. Rhine has stated: "Let me emphasize, too, that psi is profoundly unconscious. . . . psi is simply not capable of being dragged into consciousness unconverted and direct. . . . Consider the experimental findings themselves. They are consistent on this point, that the subject simply does not know reliably when the act takes place in an ESP test or whether the response he makes is right or wrong" (11, p. 108).

It is true that subjects in card-calling tests from time to time remark that "it all feels like guessing," as Mr. Huxley says. But do the experimental results support these clinical impressions? Having scoured the literature fairly extensively, we came to the conclusion that no good evidence exists that bears on the problem and nothing to support the expressions just quoted from Dr. Rhine. Some of the previous work, such as it is, will be examined at the close of this paper. Suffice it to say that little systematic research has ever been done on the problem of subjects' awareness of trial-to-trial success or failure in ESP tests. The importance of the problem led us to undertake such research.

## The Plan of the Research

The material to be reported was obtained in part in our research on the relationship of personality to ESP already published (7), and in part in subsequent research on the same subject, to be reported later. The experimental setup was much the same in both investigations; the first took place in a room in the Parapsychology Laboratory and the second in a seminar room of the Duke University Library building. The experiments were of the clairvoyance type; that is to say, the experimenter (one or other of ourselves) did not see the faces of the cards but merely held them one by one face downward behind a screen. This experimenter and the percipient were separated by a distance of several yards. The wooden screen had a rectangular hole or window near its center. In half of his 16 runs the subject was shown the target card at the window immediately after his call, and therefore he knew at once whether his guess was right or wrong. In the other half of his runs he was not shown the cards but learned his score only after the completion of each run. These two different card situations we denote as "Known" and "Unknown."

Our approach to the question, Can the subject distinguish between right and wrong guesses? was briefly described in the previous report and the paragraph may conveniently be repeated here:

> "In addition to trying to call the symbol on the target card, the subject was also asked to say *which* of his calls he felt were right. It was mentioned to him that on some trials he might have an impression of 'correctness,' or a feeling that the call just made was 'better' than others, or even a feeling that this call was 'different' from the others. On such occasions he was to follow his call immediately with the word 'check': thus, 'star check.' The recording experimenter then put a check mark next to that call on the record sheet. On Known runs, the subject would know immediately afterwards whether he had been right or wrong in his feeling of success; on Unknown runs he would not know until the routine check-up at the end of the run whether his impression of correctness coincided with hits. He was instructed to try to learn to identify any special feeling accompanying right calls. Subjects were urged to call *between 5 and 10 checks* per run. Some subjects were reluctant to do this, many apparently feeling embarrassment when their 'checks' did not match the hits, and the experimenters frequently had to use friendly persuasion to get some subjects to say 'check' at all" (7, pp. 140-42).

(Copy of part of a record sheet was reproduced on p. 141 of that report and may help in understanding how the checks were recorded.)

We will consider the two researches separately and then in conjunction. The reason for coaxing the subjects to give between five and ten checks per run was twofold: first, a paucity of checks or a super-abundance of them would be insensitive to any real effect. To illustrate with an extreme case: if an average run contained only one check, the probability of the check coinciding with a hit would be very small; if at the other extreme an average run had 24 checks in 25 calls there would clearly be no serious attempt at discrimination between hits and failures. Second, to advise the subjects to employ five to ten checks carried the implication of above-chance scores.

The subjects were divided into two groups: (1) those who followed instructions to give an average of between five and ten checks per run, and (2) those who failed to give the required number. This latter group is made up mainly of subjects who, in spite of friendly urgings, gave fewer than five checks per run. Some subjects averaged less than one check per run and several refused to give any checks at all. The results of these subjects, then, who did not give the checking project a systematic trial, are treated separately. To pool them with the others would mean in effect combining their results with the unchecked trials of the other subjects—a procedure which might mask any effect obtained by those persons who were seriously trying to follow instructions to distinguish between right and wrong ESP calls.

We decided on the partitioning of the percipients into the two groups in the light of the following: Prior to the first experiment we made preliminary ESP tests on each other which gave us the impression that checking would be most sensitive in the region of between five and ten checks per run. Accordingly we suggested to the subjects of the first experiment that they try to give approximately that number of checks per run. We held no hard and fast views, however, and formed no rigorous hypothesis prior to that first experiment. In that research we were prepared to go where the data led. In fact, after the experiment when the subjects were separated into groups according to their average number of checks, it was apparent that the effective group consisted of those subjects who had checked between five and ten calls per run as we had asked. The work of the other subjects was formally assessed, but being found uninteresting, was laid aside. On the basis of those first experimental findings, the hypothesis for the second research was predecided.

Because of the marked difference in conditions in the Known and Unknown runs, we shall continue in this paper to consider the results of the two procedures separately. Furthermore, the separation of

subjects into groups that followed or did not follow checking instructions will be based on the number of checks they gave for *each* condition. Thus some subjects will be included in the group who followed instructions for the Unknown runs, but will be omitted from that group for Known runs because they gave too few checks in that section of the experiment.

## Results, 1952 Series

At the close of the first research an inspection of the data showed that only a small minority of subjects had harkened to the advice proffered them. Of 36 subjects, 11 gave the required number of checks in the Unknown type of test, and 24 gave less than that number. In the Known section, only 8 subjects could be persuaded to give the desired number of checks. One young lady gave more than 10 per run in both sections: her prodigality was unrestrainable, averaging 17.6 checks per 25 calls. We hinted and cautioned but to no effect, and long before the end we let her go ahead unreined, and, if the truth be told, we ourselves became fascinated by her reckless abandon.

Statistically, the question to be asked in assessing the results is: *Does the subject say "Check" in a significantly higher proportion of cases when he has hit the target than when he has failed to hit the target?* If the statistical answer is in the affirmative, then the conclusion to be drawn (ostensibly at any rate) is that the subject sometimes *knows* when he is right. His experience is no longer unconscious, but conscious and cognitional. The question at issue can be put in a different form: *Are the checked hits proportionately more frequent, to a significant degree, than the unchecked hits?* The two questions require the same statistical treatment and provide identical answers. The two proportions are compared by means of the standard two-by-two table.[2]

---

[2] In ordinary card-guessing the subject is invited to ***match*** his five different types of guesses against five different types of card symbols. Correspondences between calls and targets are statistically assessed by "matching theory," producing in the end a "critical ratio" or a $\chi^2$. Precisely the same situation is present in the assessment of checks. Here instead of five kinds of targets and five kinds of guesses, we have only two of each; namely, for targets: Hit or Miss, and for calls: Check or Noncheck. The 2 x 2 tables extensively used in this paper look as if they presented for solution a comparison between two ratios, i.e., checked hits to total hits compared with checked misses to total misses. That is one way of looking at the problem, but it is equally correct to regard it as a problem of pure matching, checks against hits, etc. In fact, if the data are dealt with, not by 2 x 2 tables, but by matching theory, *exactly* the same values of $\chi^2$ emerge as in the tables used in this paper. The point to observe is that the assessment of ESP hits and also of Checks are problems in the same statistical field. The psychological factors may, however, be quite different in the two situations. A useful reference to matching theory is: S. S. Wilks, *Mathematical Statistics,* Princeton University Press, Princeton, N. J., 1946, pp. 208 ff.

Record sheets that contained fewer than the required minimum of checks were assessed as a matter of course, but there was nothing of interest in them. In both the Known and Unknown tests, the checked misses were relatively more frequent than were checked hits, but the differences were not significant. The results are given in the appendix, where it may be noted also that the subjects whose checks were fewer than the required number gave an average of only 2.28 checks for Unknown runs and of only 1.67 checks for Known runs. It is no matter for surprise that percipients who were so reluctant to indulge in checks in spite of urgings could add little to our knowledge of whether or not subjects can discriminate between successful and unsuccessful ESP calls.

The lively lady who exceeded check requirements also produced nothing of moment, as was to be expected. (Her results are also shown in the appendix.)

The picture begins to change when we turn to those subjects who fell in with our wishes. There were here as elsewhere two experimental situations—the Known and the Unknown runs. In their Known runs, the eight subjects who gave the required number of checks provided nothing of significant interest as may be seen in Table 1.

TABLE 1

Known Runs, 1952 Series

(8 cases; 64 runs; +9 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 78 | 327 | 405 |
| Not Checked | 251 | 944 | 1195 |
| Total | 329 | 1271 | 1600 |
| Per cent Checked: | 23.7% | 25.7% | |

$\chi^2 = .56$
$P = .45$

As the percentages at the foot of the table indicate, the result is negative; in the Known runs subjects on the whole tended to put their checks *against the misses* rather than against the hits. Of the hits, 23.7 per cent were checked, and of the misses, 25.7 per cent were checked. The effect, however, is not significant and it would be unwise at present to stress it.

But in the Unknown runs, as shown below, the eleven subjects tended to a significant degree to call "Check" when they hit the target and to remain silent when they failed to hit (see Table 2).

TABLE 2

Unknown Runs, 1952 Series
(11 cases; 88 runs; —4 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 140 | 436 | 576 |
| Not Checked | 296 | 1328 | 1624 |
| Total | 436 | 1764 | 2200 |
| Per cent Checked: | 32.1% | 24.7% | |

$\chi^2 = 9.89$
$P = .0016$

The result is very significant and would occur on the chance hypothesis only about once in 600 such tests. The percentages at the foot of the table show that the subjects tended to place their checks against the ESP-call hits (32.1%) rather than against the misses (24.7%).

The next statistical step is to inquire into the relation of the Known and Unknown data. One nontechnical way of phrasing the problem is to ask: Does the fact of the subject's seeing the card at the window exercise an inhibitory effect on his feeling of conviction as compared with the other situation? The method of solving this problem is too laborious to be described here, but may be found in standard statistical texts, as for example (13, pp. 200-203). The comparison of the two situations in the present case results in a $\chi^2$ of 6.53, the associated probability of .01 indicating that the two situations produced significantly different effects.[3] In the light of this result it would be misleading to combine the two tables. When these 1952 data were first assessed, we toyed with the hypothesis that the effect of seeing the card at the window in the screen was to confuse the subjects' checking ability and indeed to put it into reverse. That view has dimmed with further experience, as will be seen below.

[3] In more technical terms, the problem of comparing the two fourfold tables is one of testing the second-order interaction. The significant chi square obtained in this test indicates that the Known and Unknown data are drawn from *different* populations. For this reason combination of the two tables is contraindicated.

## Results, 1953 Series

The 1952 findings, being suggestive of some real but still undefined factor operating in the subject's mind as he called aloud his guesses, were sufficient incitement to further inquiry. This was done in the second research (1953 Series). More intensive efforts were made to persuade subjects to give the desired number of checks; namely, between 5 and 10 per run. We built a verbal picture of the advantages to be obtained by following this advice. We encouraged percipients by explaining that this was virtually a new development in research, and their cooperation would therefore be of unusual value. When a subject achieved no more than a chance score of five in his ESP calls, we tried where possible to call attention to any success he might have achieved in checking. For example, we would point out that out of his (say) six checks, three coincided with his ESP hits which was markedly above chance. From subject to subject, we found it extremely interesting to observe how often such an attractive outcome arose—chance on ESP calls, above chance on checks.

Of 35 subjects in the 1953 Series, 14 gave the required number of checks in the somewhat embarrassing Known runs and 23 gave the proper number in the less distracting Unknown runs, the standard ESP test. For both situations pooled, 24 different persons come into this category, that number comprising 13 subjects who gave the required number of checks in both Known and Unknown situations, one who gave that number in his Known runs only, and ten who gave that number in the Unknown runs only.

(As in the earlier series, subjects who did not follow the checking instructions showed no interesting effects in their data. Their results are given in the appendix.)

Checking in the Known runs, though not significant, was appreciably improved from the previous series and was in the desired direction. The figures are given in Table 3.

TABLE 3

Known Runs, 1953 Series

(14 cases; 112 runs; +1 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 166 | 584 | 750 |
| Not Checked | 395 | 1655 | 2050 |
| Total | 561 | 2239 | 2800 |
| Per cent Checked: | 29.6% | 26.1% | |

$\chi^2 = 2.81$
$P = .09$

The Unknown runs were significant, though not so impressively as in the preceding series. The results appear in Table 4.

TABLE 4

Unknown Runs, 1953 Series
(23 cases; 184 runs; —44 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 267 | 995 | 1262 |
| Not Checked | 609 | 2729 | 3338 |
| Total | 876 | 3724 | 4600 |
| Per cent Checked: | 30.5% | 26.7% | |

$\chi^2 = 5.04$
$P = .025$

Here, as for the Known runs, the subjects checked a higher percentage of hits than of misses, and this time the reality of the difference is made significantly clear by $P = .025$.

We then asked whether the checking effect was different in the Known runs as compared with the Unknown, as had been so strikingly shown in the 1952 Series. The difference now in the 1953 data is represented by $\chi^2$ of .005, with $P = .94$, indicating an extremely close similarity of checking success in the two situations. In other words, the descriptions "Known" and "Unknown" have no bearing on the checking results in this series. It follows therefore (13, p. 203) that the two tables should be combined; we have then Table 5.

TABLE 5

Total, 1953 Series
(37 cases; 296 runs; —43 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 433 | 1579 | 2012 |
| Not Checked | 1004 | 4384 | 5388 |
| Total | 1437 | 5963 | 7400 |
| Per cent Checked: | 30.1% | 26.5% | |

$\chi^2 = 7.80$
$P = .005$

For the 1953 Series as a whole, the subjects[4] attached a greater percentage of checks to correct ESP calls than to incorrect ones (30.1% and 26.5%, respectively). The total results are significant. The reader will not fail to observe that the requirement to keep the Known and Unknown data separate in 1952, yet to combine them in 1953, implies that the results of the two researches are (though in this respect alone) inconsistent with each other. This is regrettable, but in matters like this one must follow, however reluctantly, where statistical logic leads.

With regard to this inconsistency in the results of the two series, our surmise is that the problem of whether or not Known and Unknown results should be combined will resolve itself in future experiments. In which direction the decision will fall—toward combining Unknown and Known always or never—we shall see after future experiments, but being unable to forecast future findings, we cannot decide *now* what will be the right course to follow. "Experience teaches. Let us learn by experience."

It will be observed that the probabilities associated with the Known and Unknown tables in 1953 are .09 and .025 (respectively), but that the union of the tables gives a probability of .005. Those who derive delight from the pursuit of probabilities along the infinite tails of the probability curve may obtain satisfaction from the comparison of one "significant" area (.025) of the probability plane with another (.005). We are unable to share such enthusiasm: our interest lies not in the areas on a piece of paper (the P's), but in the *parameters*—that is to say, in *measuring the strength of the psychic effects*. We hope to develop this theme in future papers.

## Both Series Pooled

Because of the similarity of the checking effect in the Unknown data of the two series, it is appropriate to combine the two results to determine the over-all significance of the checking effect in the standard (Unknown) ESP test. The total is shown in Table 6.

The probability for the total Unknown data is one that would arise by chance once in 3000 such series, and presumably places the finding beyond reasonable doubt. The union of the two Known series tells a

[4] The total number of subjects represented in these results is 24, as was mentioned before. The "37 cases" listed in the total-results table refers to the number of separate Known and Unknown score-units included in the table and is simply the sum of the cases listed in the two previous tables. Thirteen subjects contributed data to both the Known and Unknown tables, and they are counted as 26 cases in the total-results table; eleven other subjects appear in only one of the previous tables (ten gave too few checks to qualify for the Known section and one gave too few to be included in the Unknown table).

TABLE 6

Total Unknown Runs
(34 cases; 272 runs; —48 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 407 | 1431 | 1838 |
| Not Checked | 905 | 4057 | 4962 |
| Total | 1312 | 5488 | 6800 |
| Per cent Checked: | 31.0% | 26.1% | |

$\chi^2 = 13.13$
$P = .0003$

different story. In the first research percipients tended to place their checks not against the hits, as was desired, but against the misses. The opposite happened in the second series. Here the disposition of the checks, though not significant, was in keeping with the stronger results shown in the Unknown data. The two Known series are not significantly different from each other in their effects, and when combined, provide the figures in Table 7.

TABLE 7

Total Known Runs
(22 cases; 176 runs; +10 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 244 | 911 | 1155 |
| Not Checked | 646 | 2599 | 3245 |
| Total | 890 | 3510 | 4400 |
| Per cent Checked: | 27.4% | 26.0% | |

$\chi^2 = .78$
$P = .38$

Obviously, this result is nonsignificant; the subjects checked proportionately almost as many misses as hits. Thus, as far as the data go, there is no evidence of subjects having any "conviction of success" when they know immediately what the target card is.

## Relation of "Feeling of Success" to Personality Factors

The inquiry into checking effects formed part of a larger investigation of the relationship between factors of personality and ESP. A

report on the first personality research has been published in this JOURNAL (7), and there is now in preparation a report on the second research (the 1953 Series). Three standard personality questionnaires were given to the subjects in order to obtain scores for them on some 19 factors of personality: J. P. Guilford's "An Inventory of Factors STDCR" (3), the Guilford-Martin "Inventory of Factors GAMIN" (4), and R. B. Cattell's "Sixteen Personality Factor Questionnaire, Form A" (1). Broadly speaking, those personality attributes that may be described as "socially desirable" were found to be associated with high ESP scores. In particular, in the first research subjects who in their daily lives were self-confident (on Guilford-Martin's Factor I) and emotionally stable (on Cattell's Factor C) were found to score well in ESP card tests. Contrariwise, those who were deficient in self-confidence or were emotionally unstable tended to score poorly in ESP.

To what extent, if any, are confidence and emotional stability connected with "conviction of success," as evidenced by the check marks? Since the conclusions drawn from the checks on the Known ESP calls, as recorded above, are without significance, we shall concentrate on the Unknown or standard ESP test data and upon the data of those subjects who gave the required number of checks.[5]

Subjects whose measure of self-confidence was above the average for the group will be called "confident," and those who rated below average will be called "unconfident"; and on a similar basis subjects were rated "emotionally stable" and "emotionally unstable."

For both series and for their pooled total, the confident subjects gave the results shown in Table 8.

There was a glimmer of promise in 1952 that confident subjects knew the discriminatory art as between success and failure in ESP, but in the following year the hope faded out, as the pooled results show. There is no reason to suppose at the present stage of the work, that confident people can distinguish between their hits and their failures.

For the unconfident subjects who followed checking instructions the picture is different. In both series the percentage of checks is much higher for hits than for misses, as Table 9 shows.

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[5] One subject who gave the required number of checks and whose data were included in earlier tables, did not return his personality questionnaires, and his results have therefore had to be omitted from the personality study.

TABLE 8

Confident Subjects

1952 Series

(6 cases; 48 runs; +1 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 74 | 234 | 308 |
| Not Checked | 167 | 725 | 892 |
| Total | 241 | 959 | 1200 |
| Per cent Checked: | 30.7% | 24.4% | |

$\chi^2 = 4.01$
$P = .05$

1953 Series

(10 cases; 80 runs; —31 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 96 | 413 | 509 |
| Not Checked | 273 | 1218 | 1491 |
| Total | 369 | 1631 | 2000 |
| Per cent Checked: | 26.0% | 25.3% | |

$\chi^2 = .08$
$P = .78$

Both Series

(16 cases; 128 runs; —30 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 170 | 647 | 817 |
| Not Checked | 440 | 1943 | 2383 |
| Total | 610 | 2590 | 3200 |
| Per cent Checked: | 27.9% | 25.0% | |

$\chi^2 = 2.17$
$P = .14$

TABLE 9

Unconfident Subjects

1952 Series

(5 cases; 40 runs; —5 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 66 | 202 | 268 |
| Not Checked | 129 | 603 | 732 |
| Total | 195 | 805 | 1000 |
| Per cent Checked: | 33.8% | 25.1% | |

$\chi^2 = 6.13$
$P = .013$

1953 Series

(12 cases; 96 runs; —13 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 160 | 548 | 708 |
| Not Checked | 307 | 1385 | 1692 |
| Total | 467 | 1933 | 2400 |
| Per cent Checked: | 34.3% | 28.3% | |

$\chi^2 = 6.32$
$P = .012$

Both Series

(17 cases; 136 runs; —18 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 226 | 750 | 976 |
| Not Checked | 436 | 1988 | 2424 |
| Total | 662 | 2738 | 3400 |
| Per cent Checked: | 34.1% | 27.4% | |

$\chi^2 = 11.86$
$P = .0006$

TABLE 10

Emotionally Stable Subjects

1952 Series

(7 cases; 56 runs; +4 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 83 | 285 | 368 |
| Not Checked | 201 | 831 | 1032 |
| Total | 284 | 1116 | 1400 |
| Per cent Checked: | 29.2% | 25.5% | |

$\chi^2 = 1.59$
$P = .21$

1953 Series

(14 cases; 112 runs; —19 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 168 | 621 | 789 |
| Not Checked | 373 | 1638 | 2011 |
| Total | 541 | 2259 | 2800 |
| Per cent Checked: | 31.1% | 27.5% | |

$\chi^2 = 2.74$
$P = .10$

Both Series

(21 cases; 168 runs; —15 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 251 | 906 | 1157 |
| Not Checked | 574 | 2469 | 3043 |
| Total | 825 | 3375 | 4200 |
| Per cent Checked: | 30.4% | 26.8% | |

$\chi^2 = 4.26$
$P = .04$

All three results in Table 9 are significant. The first is confirmed by the second, and the probability associated with the pooled total is such as would occur on the chance hypothesis once in 1600 tests of this size. The contrast between confident and unconfident percipients suggests that the former are less gifted in the art of discrimination than the latter.

Passing now to the factor of emotional stability, we should mention that the majority of those found to be endowed with this quality were also found to be self-confident, and accordingly, the data for the two factors to some degree overlap. The same consideration applies to emotionally unstable people: some of their data are included also in the unconfident group above.

For both series and for the pooled total, the emotionally stable subjects show a tendency to put a somewhat higher percentage of checks beside their ESP hits than beside their misses. The results are significant at the 5 per cent level (see Table 10).

When we turn to the results of the unstable subjects, the picture is somewhat improved (see Table 11).

Generally, in these "conviction" phenomena (as expressed in checking) the difference between the percentages of checked hits and checked misses is only around 7% or 8%. An inspection of the 1952 section of Table 11 shows a much wider separation; the difference is 14.2% and is the most striking dichotomy obtained in any part of the data. The result is reflected in the statistical result which is unmistakably significant. In the center section of the Table (1953 series) the checked hits are only slightly better than the checked misses, the difference being nonsignificant. When both series are pooled, however (the third section), the relationship between instability and conviction is statistically significant with a probability of .0016. The outcome seems to be that the emotional stability measure is not a very satisfactory differentiator of the checking effect. For the pooled data both the emotionally stable and the emotionally unstable percipients provide significant results, though the stable subjects' results are much less striking than those of the unstable. It appears prudent to leave the question as an unsettled one until further data have been collected.

## Comments

What has been found? What are the implications of what has been found? And what do the implications suggest for future research?

*The Findings*

1. In the standard or Unknown type of ESP test, if the subjects

TABLE 11

Emotionally Unstable Subjects

1952 Series

(4 cases; 32 runs; —8 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 57 | 151 | 208 |
| Not Checked | 95 | 497 | 592 |
| Total | 152 | 648 | 800 |
| Per cent Checked: | 37.5% | 23.3% | |

$\chi^2 = 12.90$
$P = .0003$

1953 Series

(8 cases; 64 runs; —25 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 88 | 340 | 428 |
| Not Checked | 207 | 965 | 1172 |
| Total | 295 | 1305 | 1600 |
| Per cent Checked: | 29.8% | 26.1% | |

$\chi^2 = 1.75$
$P = .19$

Both Series

(12 cases; 96 runs; —33 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 145 | 491 | 636 |
| Not Checked | 302 | 1462 | 1764 |
| Total | 447 | 1953 | 2400 |
| Per cent Checked: | 32.4% | 25.1% | |

$\chi^2 = 9.95$
$P = .0016$

accept the experimenters' advice and call out the word "Check" between five and ten times per run of 25 calls, there is a substantial chance that they will say "Check" proportionately more often on their correct ESP calls than on their incorrect ones. Or, in different form, though it comes to the same thing, if a subject has just called a correct ESP symbol, he is relatively more likely to say "Check" ***then*** than if he had called the wrong ESP symbol; in the latter case he tends ***not*** to say "Check." This effect was significant for both the 1952 and 1953 series. For their pooled total the results are highly significant with a probability of about 3 in 10,000.

2. This ability to say "Check" relatively more often after hits than after misses was found to be concentrated in the group of ***unconfident*** subjects in both series (P for the total = .0006). Confident subjects, on the other hand, seemed unable to distinguish between their hits and misses.

3. Subjects who were rated emotionally unstable also appeared to be gifted at saying "Check" at the right time and at refraining from saying it at the wrong time. For the total of both series their results were such as would be expected by chance less than twice in a thousand such series. But the emotionally stable subjects were less successful in putting their "Checks" in the right places. Their combined results give a probability of .04.

4. In the Known type of ESP test where each card was seen by the subject immediately after it was guessed, the results were generally uninteresting and statistically insignificant. Some remarks will be made later suggesting possible reasons for the failure of subjects to use their "Checks" effectively in this type of ESP test.

5. Subjects who gave less than the five-check minimum requested by the experimenters were completely unsuccessful in distinguishing between their hits and misses in both series. The few subjects who over-checked also gave uninteresting results.

* * * *

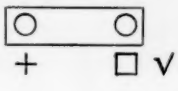
The checking phenomenon is not a powerful thing, any more than ESP is in its quantitative setting. Our experimental design was such as to permit the reality of the checking effect to manifest itself in two opposed situations. As things turned out, it was strongest and significant in the Unknown or standard ESP test, about which more will be said presently. It is perhaps best to consider first the Known ESP test in which the subjects appeared unable to distinguish between their right and wrong ESP calls. This is the test in which the subject, having announced his ESP guess and been given a second or two to say "Check" if he wishes, sees the target card at the "window" in the wooden screen. Up to that point neither of the

experimenters nor of course the subject has any sensory knowledge of the target symbol. At the moment of seeing the card, the subject is confronted with one of four different situations which will no doubt create different emotions. Let us note their varied qualities, from the most pleasant to the most depressing. Suppose the target is "Star." The subject may call:

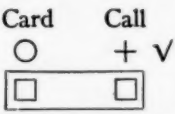
1. "Star," and then "Check." His reaction is correct on both occasions.
2. "Star," but fails to say "Check." (Is he uncertain?) His reaction was right the first time, but by omission, wrong the second.
3. Any card except "Star," and avoids saying "Check." (Is he uncertain about his original call?) He was wrong the first time, but his silence preserved him from erring a second time.
4. Any card except "Star," and he calls "Check." He was twice wrong.

The last experience is the most disheartening, and we have often seen subjects deeply chagrined by it. The first experience gives unalloyed satisfaction, but all the other situations create mixed emotions for the card-guesser. Failure to evince the checking effect in the Known runs is, we believe, due to the disturbing or antagonistic influences just described. Also, subjects in general were more reluctant to indulge in checking in the Known runs than in the Unknown, as is shown in some of the tables where in each case fewer subjects contribute to the Known section than to the Unknown.

In these Known runs, both of the first two experiences just described (those of being correct on the ESP call, either with or without a check) seemed to generate a false feeling of confidence in many subjects so that they tended to say "Check" after their *next* ESP call. This tendency was so noticeable that at the end of the experiments we inspected the records to see whether the effect was general. In the data of the subjects who followed instructions, we counted the number of times they said "Check" on the *trial after a correct ESP call.* To provide a rough basis of comparison, we also counted the number of times "Check" was said on the *trial before a correct ESP call.* (We arbitrarily omitted those cases in which the check in question was attached to a correct ESP call; in other words, we considered only *wrong* checks on the trials just before and just after correct ESP calls.) We found 269 cases in which the subjects wrongly said "Check" on the trial following a correct ESP call, thus:



In only 188 cases were checks incorrectly attached to the trial preceding a correct ESP call, thus:




If we consider that by chance these "wrong checks" should be evenly distributed before and after correct trials, the difference between the 269 wrong checks following hits and the 188 wrong checks preceding hits is highly significant. The measure is admittedly a crude one, but it does serve to indicate that on Known runs, subjects do tend to say "Check" on the trial after a hit more often than expected by chance. On these runs, the subject's attention is centered on the screen behind which the experimenter is holding the cards. The subject searches his mind trying to decide which ESP symbol to call. He chooses one and watches the window for the target card to appear. He is right. This experience is most pleasing and seems to give many subjects the feeling "now I know how to do it." So his sudden optimism excites him to exclaim, after his next call, "Check." And he is wrong. Once bitten, twice shy; after such a rebuff, he withholds his checks for a few trials. Another correct ESP call comes along to restore his confidence and again he ventures a "Check." This description is oversimplified—there are of course checks elsewhere in the run. The point is that it seemed (and later analysis bore out the impression) that the experience of a successful call appeared to make the subjects unduly confident on the *following* call. This may be the major reason for the failure of the subjects to place their checks correctly in the Known runs.

An amusing and at times disconcerting feature of the Known runs was the tendency of some subjects to say "Check" *after* they had seen the target at the window. These checks were of course scrupulously disregarded by the experimenters irrespective of how much some percipients insisted on their *bona fides*. One subject in particular burst forth with an emphatic "Check" after each experience of seeing that her ESP call was right. She firmly maintained that she had known she was right and that we ought to mark a check on our record. It was explained to her over and over that she must say "Check" *before* seeing the card. Eventually to satisfy her, we made a separate record of the checks she gave after seeing the hits (the record was of course discarded). To anyone who tries the experiment it may come as something of a surprise to find how, many times, a very strong conviction that one *knew* what the card was arises *after* seeing the card. The wisdom that cometh after the event is a common experience in psychical research as in other walks of life, and it may

illustrate how misleading it would be to put faith in spontaneous cases of "conviction" in which no overt action was taken to affirm their reality.

* * * * *

Most of this paper is restricted to the results in the Unknown section, where the standard ESP test was given. Here the subject saw no disturbing card at the window, and could proceed from Call 1 to Call 25 with untouched equanimity. The results were significant in the first research, and, with a different group of subjects, were repeated and statistically confirmed in the second.

The preceding pages have presented the total Unknown data for all qualifying subjects. Such results might, however, be ascribable to striking demonstrations on the part of only one or two percipients, with the others contributing nothing. The question is: How many persons out of the total taking part contributed to the significance of the outcome? In other words, how many subjects checked a higher percentage of hits than misses?

Mean chance expectation occurs when the percentages of checked hits and checked misses are equal. The checking effect is favored when the checked-hits percentage is greater than the checked-misses percentage; in the converse situation, the checking is disfavored. On the assumption that chance alone were operative, a subject's results would be as likely to help the effect as to hinder it; that is, the probability of either event is one-half. (The case in which a subject's results on checked hits and checked misses were equal never appeared in the researches; all subjects either "helped" the checking effect or "hindered" it, though in varying degrees.) The probability against the chance hypothesis that a given number would "help" can be obtained by summing the appropriate terms of the binomial distribution.[6]

In the first research there were 11 subjects of whom 9 showed the desired checking effect in the Unknown section. Notwithstanding the smallness of the numbers, the result is significant ($P = .033$).

In the second research 14 subjects gave a higher proportion of checked hits than of checked misses, while for 9 subjects the reverse was true ($P = .105$).

Taking both researches together we have 23 subjects who placed their checks more often beside correct ESP calls than beside incorrect ones, and 11 who did the reverse. The probability here is .012, which

[6] Summation of the binomial is laborious. A short cut is available by transferring from that discontinuous distribution to its "continuous" analogue, the incomplete beta distribution. An approximation to the summed terms can then be obtained from Karl Pearson's *Tables of the Incomplete Beta-Function*, from which in fact the above results were obtained.

TABLE 12

Relation of Checking Success to Run Scores

| Run Score | 1952 SERIES No. Runs | 1952 SERIES Hits Checked | 1952 SERIES Misses Checked | 1953 SERIES No. Runs | 1953 SERIES Hits Checked | 1953 SERIES Misses Checked | BOTH SERIES No. Runs | BOTH SERIES Hits Checked | BOTH SERIES Misses Checked | Average No. Checks Per Run |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 | 50.0% | 24.0% | 7 | 42.9% | 25.0% | 11 | 45.5% | 24.6% | 6.36 |
| 2 | 2 | 25.0% | 23.9% | 19 | 39.5% | 30.4% | 21 | 38.1% | 29.8% | 7.62 |
| 3 | 13 | 28.2% | 27.6% | 25 | 26.7% | 24.2% | 38 | 27.2% | 25.4% | 6.39 |
| 4 | 15 | 31.7% | 25.7% | 34 | 30.9% | 28.3% | 49 | 31.1% | 27.5% | 7.02 |
| 5 | 19 | 33.7% | 26.1% | 34 | 24.7% | 24.7% | 53 | 27.9% | 25.2% | 6.43 |
| 6 | 21 | 32.5% | 24.1% | 24 | 33.3% | 23.7% | 45 | 33.0% | 23.9% | 6.51 |
| 7 | 8 | 35.7% | 19.4% | 19 | 30.8% | 26.0% | 27 | 32.3% | 24.1% | 6.59 |
| 8 | 4 | 28.1% | 20.6% | 16 | 30.5% | 31.3% | 20 | 30.0% | 29.1% | 7.35 |
| 9 | 1 | 55.6% | 31.3% | 5 | 37.8% | 36.3% | 6 | 40.7% | 35.4% | 9.33 |

carries the implication that the art of discrimination is the gift of many percipients—in the pooled results just given, 68% of them—and not merely the quality of one or two of them.

A clearer light is shed by the unconfident subjects, who in contrast to those described as "confident" were notably successful. There were 17 such subjects, of whom 13 aided the checking phenomenon. The probability of this, P of .025, implies that the result is fairly general among the unconfident subjects and is not the special gift of one or two.

A question proper to ask is whether checks are more successful when run scores are high than when they are low. Table 12 shows the checking results for the various possible run scores. In reading the table it will be understood that the absolute percentages of checked hits and of checked misses are not here the criterion of judgment—rather the *differences between those* percentages and in particular the direction of the differences. A difference in favor of checked hits is evidence of the subjects' calls of "Check" being discriminatively effective. The table shows that for all ESP run scores, 1, 2, 3 . . . 9 per run, *the difference is in favor of the checked hits.* (There are two extreme cases in the first of which one subject failed to make a single ESP hit in one run, and consequently his six check marks were failures; and in the other case a percipient who made 11 hits in one run, but failed to say "Check" throughout the run. These cases comprising only one run each are omitted from the table.) Thus, for ESP run scores of 1, 45% of the hits were checked, but less than 25% of misses. At the other end of the range, with high run scores of 9, nearly 41% of the hits were checked but only a little more than 35% of misses were checked. The same loading of the checks on the hits is consistent through the whole range of scores. Regarded separately, the 1952 Series has exactly the same consistency as that just mentioned; and the 1953 Series is almost as good—the only exceptions being for ESP score 8 where the checks very slightly favor the misses, and run score 5 where the checked hits and checked misses have the same proportions, 24.7%.

To sum up in a word, success in checking operates effectively on all sizes of run scores.

As a subsidiary item, the last column of the table gives the average number of checks per run for the various ESP scores. The average number of checks for the whole group of scores was 6.8 per run. The material under discussion is the Unknown run data, in which therefore the ESP score was not known until inspection after the run. So it is an attractive question to ask whether subjects feeling "This is going to be a good run," put in a large number of checks.

And conversely, if the subject had a feeling that the number of ESP hits would be low. The evidence here is uncertain and is given only to complete the picture. From one ESP hit to nine hits there is no regular increase in the number of checks given per run. Still, the lowest average, 6.36, occurs when the subject (unknown to himself) is scoring only one ESP hit per run and the highest average, 9.33, when he is scoring nine hits. The intervening averages show a certain wobbliness, but it may be of interest to observe that from the mean expected ESP score (that is to say, 5) upwards the number of checks steadily increases—as if the guessers knew they were scoring better in these and could afford to be more bountiful with their checks. We have not troubled to work out the complicated correlation or regression which would measure the effect. For one thing the problem was not considered as a hypothesis prior to experiment, but was raised only as a result of inspecting the data. Thus, however interesting the regression might be, it would be illegitimate to draw conclusions from it, and the possibility of an effect is mentioned here only as suggestive of a hypothesis that might be incorporated and tested in future work.

Another enquiry might be: What is the influence of the individual experimenters? One experimenter held the cards behind the screen and was separated from the subject by a distance of several yards. The other experimenter sat at a table on the subject's left and recorded his spoken calls and checks. The experimenters exchanged duties at the midpoint of each session, so it might be asked whether checking was more successful when BMH was controlling the cards and JFN was recording, or in the converse situation. The answer is that there was none but a negligible difference between the results of the two situations; they were remarkably similar in all subdivisions and aspects of the data that have been examined.

This leads directly to the personality side of the investigation. In the previously published paper (7), it was shown that subjects who rated high in self-confidence and emotional stability also scored high in the ESP tests. Those whose self-confidence or emotional stability was below average scored low in ESP tests. The opposite is true of checking. It is the unconfident and emotionally unstable (relatively, at least) who are so successful in checking their correct ESP calls.

The confident subjects whose results appear in the earlier tables of this paper do not, as a group, give total ESP scores as high as those obtained by the entire group of confident persons whom we have tested. Half of this latter group were very restrained in using checks. The result is that few of the high-scoring confident subjects make their appearance under the "Confident" heading of the checking results table. The subjects whose data are in that table had ESP scores slightly below chance (128 runs, —30 deviation). Nevertheless,

we may wonder why these percipients failed in their attempt to distinguish between correct and incorrect ESP calls. Is it possible that their characteristic of self-confidence is responsible? According to Guilford-Martin's personality scale, these subjects have a feeling of assurance in the success of most things they undertake. It may be that when they try to check their ESP calls, their generally confident attitude prevents them from entertaining doubts of their own success; their sense of discrimination may be dulled by the overlying feeling of confidence. Or, the act of introspection required by the checking procedure may be disturbing to these subjects and may even prevent them from achieving as high total ESP scores as did those who did not give the checking procedure a systematic trial.

So far as our data go—an important qualification no doubt—the star performers are the unconfident group. Without them this research would have little to show. The unconfident subjects' ESP scores were slightly below chance (136 runs, —18 deviation); yet their checks were attached to correct ESP calls significantly more often than to misses. Their success on checks may be ascribable to some quality forming part of their personality. According to the Guilford-Martin scale, these are people who doubt their own abilities and feel that they will not be very successful in their undertakings. Yet in the ESP test, when by saying "Check," they do indicate "this call is right," their response probably reflects a more marked feeling of *difference* between their checked and unchecked trials.

An example of a superlatively self-confident subject who sought to distinguish his successes from his failures was Dr. Soal and Mrs. Goldney's subject, Mr. Basil Shackleton (14). In the words of the authors, "as he went along, B. S. from time to time volunteered comments and marked a sequence of, say, five guesses as being probably better than the rest. Sometimes he would mark a whole column of 24 as 'jolly good'; or 'this felt good'; or 'this felt better than the rest' etc." (14, p. 77). The marked trials were compared with his unmarked trials from the same chronological period. Shackleton's marks (equivalent of our checks) were a complete failure. Assessment of the data for checking provides a nonsignificant $\chi^2$ of 1.66 ***in the wrong direction***. He put a proportionately greater number of marks against his misses than against his hits. In an extreme degree this result agrees with those of our own confident subjects who were unable to distinguish between success and failure. There is another comparison: Shackleton limited himself to an average of 1.95 marks per standard 25-call run. This in spite of his enthusiasm on some occasions. In brief, the findings of Soal and Goldney are completely in agreement with our own. The comparison between confident and unconfident percipients may be summed up in two phrases. When the confident

person has made his initial attempt he has shot his bolt, but when the unconfident one has done so, it is for him merely *reculer pour mieux sauter.*

Why, as appears to be suggested by the data, are emotionally unstable subjects more skilled at checking than are the stable percipients? According to Cattell's scale, the unstable person is one who is easily annoyed by things and people, and is dissatisfied with life in general. A large component of instability, however, is lack of confidence. Consequently a number of the unstable subjects are also included in the unconfident group; similarly, the stable and confident groups overlap to some degree. At this stage of the research, the limited information available makes it unprofitable to indulge in much speculation concerning the factors of personality associated with success in checking. It is well to remember that these checking results come from a total of 6600 calls. We regard this figure as small in relation to the nature of the problem, and it is evident that more data would be of benefit to the understanding of this very singular phenomenon, and in particular in regard to the personalities who demonstrate it.

* * * * * *

What is the *nature* of the successful check? At the present stage it would be hazardous to offer a firm opinion. Conceivably it may be no more than a hitherto undetected, or at least unconfirmed, form of ESP. But there are reasons, presently to be offered, for regarding this hypothesis with a measure of doubt.

When the subject says "Check"—sometimes with remarkable assurance in our experience—has his experience passed from the "unconscious" nature of ESP to a conscious state bordering on *knowledge* or something closely approaching this? We judge that the concept that "Check" may be equatable to "knowledge" at any rate requires serious consideration. In that case it is imperative to ask, "What is meant by 'knowledge'?" The word is susceptible of several definitions, varying according to the nature of the material under discussion. The meaning we attach to it is extensively considered in works on epistemology, and it will serve our present purpose to quote two pertinent passages from Bertrand Russell. In the closing words of *Human Knowledge: Its Scope and Limits,* he observes: ". . . all human knowledge is uncertain, inexact, and partial. To this doctrine we have not found any limitation whatever" (12, p. 527). And a little earlier: "All knowledge is in some degree doubtful, and we cannot say what degree of doubtfulness makes it cease to be knowledge, any more than we can say how much loss of hair makes a man bald" (12, p. 516).

The doubtfulness that characterizes all asserted "knowledge" applies *a fortiori* to knowledge whose origin is at a paranormal source. The uncertainties of extrasensory knowledge may be conveniently illustrated by an analogy with the uncertainties of sensory knowledge. Suppose an object is displayed before the reader but at a distance of one mile. He might say, "I don't know what it is. Is it a tennis racket?" This is *guessing.* At a distance of a quarter-mile his report might be, "I think it is rectangular." At a hundred yards: "I *know* it is rectangular and it seems to be colored blue." All this shows the partial and uncertain nature of knowledge; but the observer has not yet answered the question "What is it?" However, at fifty yards he says, "I am almost sure it is the *Journal of the American Society for Psychical Research.*" At five yards he says, "I *know* it is the *Journal of the American Society for Psychical Research.*" Even this is uncertain, for he may be experiencing an illusion.

How difficult it is to decide at what point, between a mile and five yards, uncertain impressions reached the stage called "knowing." In check-work there may also be degrees of knowing, from guess-work which we should describe as pure not-knowing, through various increasing degrees of belief to the point at which the percipient's knowledge begins to approach the analogy of the five-yards distance in the above illustration. Of this latter sort there are few instances to be found in the field of paranormal events, though the case of the little girl "seeing" her mother stretched on the floor is pretty close to it. Could suitable tools of investigation be devised, however, it might well be found that there are degrees of knowledge in card-work also. To approach this problem, it would evidently be necessary first of all to discover means for the separation of chance coincidences from true cognitions. This alone is no doubt the most formidable problem awaiting solution in quantitative research. When separation of the wheat from the chaff has been obtained, the field would then be cleared for determining the degrees of knowledge that may be associated with psychical experiences.

In the foregoing paragraph we have suggested a hypothesis which may in due time be open to the test of experimental investigation. It would evidently be a hypothesis that would require to be considered along with some others; and to those others we may now turn.

In what respects do ESP calls and hits differ from the checks? The percipient calls "Star." No one consciously knows whether he is right or wrong. The experimenter at the table on his left begins to write the star symbol on the record sheet when the subject exclaims "Check." (Or this second response may come so quickly that the experimenter may not have begun to write the star symbol.) Now

there are three physical elements to be noted as being possible contributions to this ostensibly psychic experience. They are the card (Star), the record list of targets (folded and unseen behind the screen) containing the star symbol, and the record of the call on the record sheet at the other table.

Several conceivable explanations are open to discussion. First, the percipient may simply have experienced an exceptionally *strong* impression of "Star." Second, the check may be no more than a second ESP call, though of a slightly different sort from the first. In his original call the subject is trying to guess the card held behind the screen. With his second call, "Check," he is making a comparison between what he has just said and what the card actually is. Or, to say the same thing in another way, he is trying to guess a joint event. Third, he may have *precognized* the conjunction of the target list with his call list (as is done to mark the hits at the end of a run) and "seen" or foreseen not only the target but the *conjunction of target and call.* The first hypothesis would imply "conviction of success," the second would involve contemporary clairvoyance, and the third, precognitive clairvoyance. It is our view that the evidence for precognition is of uncertain status, as a careful examination of the published reports will show, and we are reluctant to import it into the present discussion.[7]

The other hypotheses, that checking success is due to the occurrence of sudden, strong impressions in the subject's field of thought or that he is making merely another ESP guess at a double event, raise other problems. Let us consider to what extent the results of this

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[7] In expressing doubts about the status of precognition, we would stress that we are not questioning the validity of Dr. Soal and Mrs. Goldney's results with Mr. Basil Shackleton. That *some* form of paranormal cognition was operating in the case of Mr. Shackleton is not, in our view, open to question. It may however be doubted whether precognition is a necessary theory to explain the results.

The type of "precognition" shown by Shackleton was his remarkable tendency to call a card on the trial *before* it was the target; this effect is more commonly called (+1) displacement. In a large part of his work, the card order was determined by lists of random numbers. In these tests, precognition is not necessary to explain Shackleton's anticipation of the card one place ahead each time, for the lists of random digits were in existence and therefore accessible to him via nonprecognitive paranormal cognition. In the section of his data where colored counters were used to determine the card order, the experimenter used alternate hands for selecting discs from a bag or bowl; thus, while one hand held up the counter to indicate the contemporary target, the other hand had chosen the counter indicative of the next target. The target one place ahead was therefore available to Shackleton by nonprecognitive paranormal cognition.

In another short series of tests with the colored counters (26 runs), when Shackleton's speed of calling was increased, he switched to hitting targets *two* places ahead of the designated target. The method of choosing these targets at the rapid rate resulted in a significantly nonrandom distribution of targets, and therefore the results cannot be subjected to meaningful statistical treatment. Thus there is no need to invoke precognition to explain the results.

paper may help in interpretation. It will be recalled that the entire group of confident subjects gave high total ESP scores; the group included in the checking results, however, gave ESP scores close to chance. Nevertheless, if the checking were merely a repeated ESP effect, then such confident subjects as remain under consideration would perform equally well as, or perhaps better than, the unconfident subjects. And this is not the case. The results of the unconfident group are somewhat stronger in suggesting that checking may not be a mere "second" ESP effect. These subjects' ESP scores were slightly below chance, yet their scores on checks were significantly above chance. If we consider their results in a slightly different form from that used earlier, we find that on checked trials alone these subjects were achieving 23.2% success (where 20% is chance expectation), the equivalent of an average run score of 5.8. On the trials they did not check, only 18% were correct—equal to an average score of 4.5 hits per run. On the assumption that checking is ESP under a different name, their checking scores ought to be as insignificant as their ESP run totals. That the contrary is true suggests that subjects in quantitative tests may experience in some small degree the feeling of conviction noted much more dramatically in spontaneous psi cases. Our results do not provide the complete answer, but rather suggest, perhaps more compellingly than was previously thought, that the problem is amenable to experimental solution.

* * * * *

The literature of ESP contains little earlier work against which to make comparisons with our own research. In *Extra-Sensory Perception After Sixty Years* (9, pp. 311 ff.), evidence cited to "establish" the fact that subjects have "no awareness of failure or success of a trial" includes the research of Woodruff and George (17, pp. 27-28), who during part of their ESP investigation invited their subjects to estimate their score at the end of each run. "The results obtained," wrote the authors, "were . . . obviously barren." In the present researches subjects also were invited to estimate their scores both before and after a run; but those estimates are not discussed here because they might only lead to the confusion of the main issue; namely, is there awareness of success or failure from trial to trial? As Stuart's work (15) showed, run score estimates may be largely determined by the subjects' reactions to knowledge of their scores on previous runs.

In Warner and Raible's "telepathy" experiment (16, p. 50) involving weight discrimination, the subjects were encouraged to give one of three responses to their guesses: "absolute certainty," "a definite hunch," "complete uncertainty." Correlation assessment upheld the null hypothesis. This interesting psychophysical experiment is, how-

ever, not readily comparable with the experiments reported now, and the authors themselves suggested that their results may reflect "the operation of one of the officially recognized senses."

Riess' subject did two ESP series (9): in A, she was reported to have averaged more than 18 hits per run; in B, her score was close to chance. Dr. Riess is reported to have observed that she "felt as much confidence of success in the 'B' series of this report . . . as in the 'A' series . . ." (9, p. 312). This single observation has of course small relation to the problem being considered here. It is difficult to see how it, together with the Woodruff-George and Warner-Raible researches, justifies the statement in *Extra-Sensory Perception After Sixty Years* that "Accordingly, there should be no question that in ESP performance there is no reliable consciousness of success" (9, p. 312).

Hilton Rice (8, p. 247) "attempted to have his subjects specify which of their witnessed calls they felt certain were correct." Dr. Rice "got 61 such indications from 6 subjects, and 35 of them were correct."[8] These data, though impressive, are small and insufficient to make the type of comparison employed in this paper.

Slightly more pertinent perhaps are the results reported by Mr. Leo Eilbert and Dr. Gertrude Schmeidler (2) from an experiment in which subjects were asked to indicate the one run of five on which they had scored highest. The ESP runs were not checked until sometime later, so that the subjects had no knowledge of their actual scores in any part of the experiment. A total of 69 guesses was secured (unwilling subjects were not forced to guess), and the results of these were significantly positive. This finding was especially interesting in view of the fact that the over-all results of the experiment were very close to chance expectation. It would seem that these subjects could indicate which of five runs were most successful. As with our own research, the problem arises as to whether the subjects experienced some "awareness" of being correct or whether they were exercising ESP. Eilbert and Schmeidler apparently lean toward the latter view since they refer to the procedure as "ESP guesses of ESP guesses" or "second order ESP." It is perhaps unwise to try

[8] Quotation is from the *Journal of Parapsychology*, Vol. 1, 1937, p. 247. In *Extra-Sensory Perception After Sixty Years*, p. 312, the same data are given as if they came from only one subject. At that point in the book the problem under discussion is "awareness of failure or success of a trial." Rice's promising results, one of the two cases bearing on this problem, are described in a footnote. At the end of the description the suggestion is made that these results may "be attributed to ESP itself, i.e., a secondary ESP of the correctness of the call. At any rate, more remarkable scores than this have been achieved by ESP." Since *perfect* ESP scores (for 25 calls) have been reported, the logical consequence of this last sentence seems to be that it is impossible to test any hypothesis about awareness of success.

to distinguish between possible explanations at this stage. The important point is that the subjects of their report apparently achieved a higher rate of success in calling the best of five runs than in calling the ESP symbols through the five runs.

There is accordingly little previous work with which to compare the present research, and in speculating on the active mental elements and the *modus operandi,* we can only judge by our own results. Three main possibilities suggest themselves as hypotheses to be tested in future research. First, is success in checking simply a fresh demonstration of ESP in which the subject has to guess *whether his ESP call was right or wrong?* Second, it may be a feeling of conviction of success, the kind of sensibility to the event that is sometimes dramatically exemplified in other departments of life with the exclamation "I KNOW I am right." If so, it is evidently open to grave doubt by the finding that the most successful exponents fell into the category of "lacking self-confidence." Third, the check following the successful ESP call may mean that the experience has passed from vague unconscious guesswork to the reality of a conscious experience, or something very close to this. The second possibility approximates to a strong *faith;* the third verges on true *knowledge.*

Whichever of these hypotheses is the strongest—and only research can uncover the answer—they apparently have a good deal in common with spontaneous psychic experiences of which two were given as examples at the beginning of this paper. The occurrences that impinged on the minds of Mr. Chaffin and the small girl were similar to those of our successful subjects in this respect: that they moved the percipients to further action.

What was the motive force that caused this further action, or indeed what was the causal chain that eventuated in the true ESP cognitions in the first instance, must presumably be referred to the mental processes present in the subject in the moments immediately prior to that in which he vocalizes some such word as "Star," and follows it up with "Check." It does seem surprising that after seventy years of psychical research by scientific methods we know scarcely more about the inner mental happenings that well up into a psychic experience than was known to Gurney and Hodgson in the eighteen-eighties.

Information about the impressions, associations, and the conflicts of choice which apparently occupy the subject's web of thought and lead to his final decision and call, would presumably be of great help in getting closer to the origins of individual psychic experiences. Presumably also it might well be the basis of the next stage in research.

## APPENDIX

I. 1952 SERIES

A. Subjects Who Checked Less Than the Required Number of Trials

UNKNOWN
(24 cases; 192 runs; —7 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 82 | 356 | 438 |
| Not Checked | 871 | 3491 | 4362 |
| Total | 953 | 3847 | 4800 |
| Per cent Checked: | 8.6% | 9.3% | |

Ave. No. Checks = 2.28 per run

KNOWN
(27 cases; 216 runs; +35 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 63 | 297 | 360 |
| Not Checked | 1052 | 3988 | 5040 |
| Total | 1115 | 4285 | 5400 |
| Per cent Checked: | 5.7% | 6.9% | |

Ave. No. Checks = 1.67 per run

B. Subject Who Checked More Than the Required Number of Trials

UNKNOWN
(1 case; 8 runs; —8 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 18 | 112 | 130 |
| Not Checked | 14 | 56 | 70 |
| Total | 32 | 168 | 200 |
| Per cent Checked: | 56.3% | 66.7% | |

Ave. No. Checks = 16.25 per run

I. 1952 SERIES *Concluded*

KNOWN
(1 case; 8 runs; +4 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 37 | 115 | 152 |
| Not Checked | 7 | 41 | 48 |
| Total | 44 | 156 | 200 |
| Per cent Checked: | 84.1% | 73.7% | |

Ave. No. Checks = 19.00 per run

II. 1953 SERIES

A. Subjects Who Checked Less Than the Required Number of Trials

UNKNOWN
(11 cases; 88 runs; —14 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 58 | 249 | 307 |
| Not Checked | 368 | 1525 | 1893 |
| Total | 426 | 1774 | 2200 |
| Per cent Checked: | 13.6% | 14.0% | |

Ave. No. Checks = 3.49 per run

KNOWN
(17 cases; 136 runs; —15 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 76 | 356 | 432 |
| Not Checked | 589 | 2379 | 2968 |
| Total | 665 | 2735 | 3400 |
| Per cent Checked: | 11.4% | 13.0% | |

Ave. No. Checks = 3.18 per run

## II. 1953 SERIES *Concluded*

B. Subjects Who Checked More Than the Required Number of Trials

UNKNOWN

(1 case; 8 runs; +3 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 17 | 68 | 85 |
| Not Checked | 26 | 89 | 115 |
| Total | 43 | 157 | 200 |
| Per cent Checked: | 39.5% | 43.3% | |

Ave. No. Checks = 10.63 per run

KNOWN

(4 cases; 32 runs; +7 deviation)

| | Hits | Misses | Total |
|---|---|---|---|
| Checked | 77 | 274 | 351 |
| Not Checked | 90 | 359 | 449 |
| Total | 167 | 633 | 800 |
| Per cent Checked: | 46.1% | 43.3% | |

Ave. No. Checks = 10.97 per run

## REFERENCES


1. Cattell, R. B., *The Sixteen Personality Factor Questionnaire,* Institute for Personality and Ability Testing, Champaign, Illinois, 1950.
2. Eilbert, L., and Schmeidler, G. R., "A Study of Certain Psychological Factors in Relation to ESP Performance," *Journal of Parapsychology,* Vol. 14, 1950, pp. 53-74.
3. Guilford, J. P., *An Inventory of Factors STDCR,* Sheridan Supply Co., Beverly Hills, California, 1940.
4. ———, and Martin, H. G., *Inventory of Factors GAMIN* (Abridged Edition), Sheridan Supply Co., Beverly Hills, California, 1943.
5. Gurney, E., Myers, F.W.H., and Podmore, F., *Phantasms of the Living,* Trübner & Co., London, 1886, 2 Vols.
6. Huxley, A., *The Devils of Loudun,* Harper and Brothers, New York, 1952.
7. Nicol, J. F., and Humphrey, B. M., "The Exploration of ESP and Human Personality," JOURNAL A.S.P.R., Vol. XLVII, 1953, pp. 133-178.
8. Pratt, J. G., "The Work of Dr. C. Hilton Rice in Extra-Sensory Perception," *Journal of Parapsychology,* Vol. 1, 1937, pp. 239-259.
9. ———, et al., *Extra-Sensory Perception After Sixty Years,* Henry Holt & Co., New York, 1940.
10. *Proc.* S.P.R. Vol. XXXVI, 1926-28, pp. 517-524.
11. Rhine, J. B., *New World of the Mind,* William Sloane Associates, New York, 1953.
12. Russell, B., *Human Knowledge: Its Scope and Limits,* Allen & Unwin, London, 1948.
13. Snedecor, G. W., *Statistical Methods,* Fourth Edition, The Iowa State College Press, Ames, Iowa, 1946.
14. Soal, S. G., and Goldney, K. M., "Experiments in Precognitive Telepathy," *Proc.* S.P.R., Vol. XLVII, 1943, pp. 21-150.
15. Stuart, C. E., "An Analysis to Determine a Test Predictive of Extra-Chance Scoring in Card-Calling Tests," *Journal of Parapsychology,* Vol. 5, 1941, pp. 99-137.
16. Warner, L., and Raible, M., "Telepathy in the Psychophysical Laboratory," *Journal of Parapsychology,* Vol. 1, 1937, pp. 44-51.
17. Woodruff, J. L., and George, R. W., "Experiments in Extra-Sensory Perception," *Journal of Parapsychology,* Vol. 1, 1937, pp. 18-30.

# Reviews

GHOSTS AND POLTERGEISTS. By Herbert Thurston, S.J. Pp. IX+210. Edited by J. H. Creehan, S.J. Henry Regnery Company, Chicago, 1954. $4.00.

This book is a collection of articles published by the late Fr. Thurston at various times from 1921. Like his earlier *The Church and Spiritualism* (1933) and *The Physical Phenomena of Mysticism* (1952) it is marked by open-mindedness, cautiousness of judgment, objectivity, and careful documentation.

In the first chapter, Fr. Thurston gives a general view of poltergeist phenomena. A poltergeist is a racketing, mischievous spirit, almost always invisible, which throws things about, knocks loudly, sometimes sets things on fire, breaks windows and crockery, and so on. The paths of the objects thrown do not conform to the laws of ballistics or of gravitation; the objects occasionally hit persons, but although seemingly with violence, seldom if ever injure them at all severely. The agency concerned appears to be conscious—capable of answering questions by raps, and sometimes of speaking by "direct voice" out of the thin air; and capable of being remonstrated with and placated to some extent, or, on the contrary, angered and provoked to fresh disturbances by execrations and words of scorn (pp. 10, 13, 49).

Weighty and abundant testimony exists that such phenomena sometimes occur, and under circumstances ruling out normal explanations. Among eminent witnesses, Fr. Thurston mentions Professor W. F. Barrett, who investigated personally the Derrygonnelly case and wrote: "I myself have seen a large pebble drop apparently from space in a room where the only culprit could have been myself, and certainly I did not throw it" (p. 3, quoted from *Proc.* S.P.R., Vol. XXV, p. 378).

Fr. Thurston cites many instances of the various kinds of poltergeist phenomena, with long extracts from the original reports, for which he gives the necessary references; and he is careful to mention such facts about the authors of the reports as may enable the reader to form some judgment for himself as to the weight to be attached to their testimony. In commenting upon the difficulty of explaining a certain very puzzling but particularly well attested case, he writes: "when we recall the multitude of more or less similar relations which come to us from every part of the world and every period of history, an obstinate skepticism as to the facts seems to me the most desperate expedient of all" (p. 50).

Not only are the many accounts of poltergeist phenomena quoted in the book interesting as problems, but some of them are also very entertaining. None of them, perhaps, more so than that, set down in the diary of a devout Catholic Hindu, Mr. T. Pillay, of the persecutions inflicted upon him and his household by a "devil" who apparently was bent on converting him to Hinduism! The whole of Ch. VI is given to the case. Only a sample of the doings of this poltergeist can be given here, but it will suffice to show that the book makes good reading.

The first incident Mr. Pillay cites occurred on March 3, 1920: garments on a clothesline upstairs in his house were found on fire, which was put out with water; but they started burning again half an hour later. "Thinking that the fire was due to some carelessness of my daughter . . . she was given a good beating" (p. 62). The next day, things started burning again, and Mr. Pillay, then suspecting that it was the work of a devil, suspended various religious pictures in the house and chalked crosses on the doors and walls. These were soon found rubbed out with cow dung, and one of the pictures thrown down and later torn to pieces. Mr. Pillay then placed a crucifix on the mantlepiece and, sitting before the fire, recited the Apostles' creed over and over; but in a moment the crucifix disappeared, and he shortly found it in the fire, burning.

He then moved to a new house, but the mischief continued there. On the morning of March 8, words were found written on the wall of one of the rooms: "My name is Rajamadan [i.e., chief mischief maker]. I will not leave you." Whereupon one of Mr. Pillay's clerks wrote underneath: "If you don't run away from this house, I would recommend you to my goddess for punishment." Later that day, the words "I will kill the man who wrote these lines" were found written on the wall. Whereupon the terrified clerk wrote: "Please excuse me. I beg your pardon." Underneath this, a day later, "I pardoned you" appeared, and the day after: "I will not leave them alone unless they become Hindus."

On March 9, Mr. Pillay called on the Bishop of Mylapore, who gave him advice, blessed a crucifix for him, and later sent him a priest, who consecrated his family to the Sacred Heart, said Mass in the house and advised a novena. This was carried through in spite of continuing disturbances, which apparently held up only at the moments prayers were being said. On March 11, Mr. Pillay was struck by a crucifix. Finally, on March 19, after a frying pan almost struck Mr. Pillay's head, words were again found on the wall—this time to the effect that the spirit would not return but would now go and trouble the person who had instigated him to trouble Mr. Pillay!

Fr. Thurston, in commenting upon the extracts he quotes from Mr. Pillay's diary, mentions various facts which support at least the essentials of the latter's narrative. He remarks, for instance, that, had that pious man simply been bent on courting favor with Catholic ecclesiastical authorities, he would hardly have done so by inventing "a story in which blessed pictures, medals, crucifixes, relics, holy-water, and exorcisms play such a very inglorious part" (p. 79).

In the concluding chapter, Fr. Thurston stresses the quantity of the evidence for poltergeist phenomena and the high quality of some of it, and, after saying that the supposition of seventeenth-century divines, which ascribed the phenomena to the devil, "cannot . . . be treated as a matter of certainty," he goes on to remark that, "be this as it may, we may reasonably call upon materialists . . . either to provide a physical explanation of these extraordinary poltergeist disturbances, or to submit some reasonable ground for rejecting the mass of evidence by which their reality has been established" (p. 202).

C. J. Ducasse

Brown University

PSYCHICAL RESEARCH TODAY. By D. J. West. Illustrated. Pp. 144. Gerald Duckworth and Co. Ltd., London, 1954. 12*s.* 6*d.*

Dr. West, who is Experimental Research Officer to the Society for Psychical Research (London), in writing this book deals not only with those topics which are generally considered central to the field of psychical research but also touches upon such topics as dowsing, stigmatization, and stage telepathy. More traditional topics covered at some length are spontaneous psychic impressions, séance room phenomena, the psychology of mediumship, and ESP research.

In addition to providing a description of well-known published material in psychical research, Dr. West is principally concerned with two important questions: (a) Are the reported phenomena in the field legitimately "supernormal"? (b) If such legitimate psychic phenomena do occur is an explanation other than a "spiritualistic" one to be preferred? Dr. West is exceedingly skeptical of the validity of much of the published spontaneous and mediumistic material. He believes that although some genuine phenomena do occur it is extremely difficult to separate the gold from the dross. In evaluating the available spontaneous case material he makes the following comment: "Indeed, it amounts to an almost invariable law in spontaneous cases that the more remarkable the alleged coincidence the worse the supporting evidence, and conversely, the better the evidence the weaker is the coincidence. There can be only one conclusion. Whether one does or does not accept that some cases are instances

of genuine ESP, most cases are spurious" (p. 31). In a later paragraph, West somewhat counteracts this negative appraisal by suggesting that some valuable suggestions amenable to experimental test can be derived from a study of large amounts of spontaneous material.

A substantial portion of this small book is concerned with a discussion of mediumship and with an evaluation of the spiritualistic interpretation of psychic phenomena. Although West is exceedingly critical of mediums and mediumistic material, he discusses favorably the work of such mediums as Mrs. Piper and D. D. Home. His evaluation of the spiritualistic interpretation will likely be of interest to most of his readers. His point of view is given in the following passage: "At one time psychical researchers took great interest in mediums because it was thought that they might provide proof of the survival of human personality after bodily health. Today it is fairly generally admitted by scientific investigators that mediumistic phenomena cannot furnish such proof. Mediums do not give a sustained and convincing reproduction of a deceased personality" (p. 77).

The last half of West's book is given over mainly to a discussion of ESP research. His treatment of the topic although somewhat sketchy is quite competent. There is a good deal of discussion of the research done by investigators in the United States and the treatment is fair and sympathetic. West is not quite inclined to accept the position that ESP research to the present time has clearly demonstrated the existence of precognitive and PK abilities, but he indicates that further research will provide the final answers.

This reviewer was quite favorably impressed by Dr. West's book. Some readers will undoubtedly feel that the mediumistic, spiritualistic point of view has not been given a fair hearing. The brevity of the book made impossible the task of dealing adequately with all of the phenomena discussed. Some will find inadequate factual material to substantiate the strong views taken on some questions. Finally, as a description of the field of psychical research today and of the task of the researcher the following passage is appropriate:

> "At the time when psychical research was much taken up with the possibility of communication with spirits, there was more enthusiasm and support forthcoming from the public. Spirit communication was to many a wonderfully attractive possibility, an escape from the harsh fatalism of modern thought. Even today, spiritualistically orientated investigations are sponsored by people who would not consider giving money to systematic research on ESP. What such persons fail to appreciate is that the pure research worker must follow where his investigations lead him; he cannot produce spirits just because someone would like to believe in them. By following facts and discoveries . . . he

comes closer to truth in the end. Nature is always more wonderful than any ready-made philosophy, be it spiritualistic or materialistic, and the realities of ESP are far more extraordinary than any preconceived notion of conversations with dead relatives. Recent research indicates that ESP is a complex interpersonal process, dependent upon the relationships of all the persons who participate. It is in fact a phenomenon that is only encountered in the context of an interpersonal field. The eminent American psychologist, Dr. Gardner Murphy, has developed this notion of an interpersonal field with properties that cannot be expressed in terms of the separate individuals, and has applied the theory both to observations on ESP and to survival evidence such as that provided by the S.P.R. cross-correspondences. So we come back to the question of survival, not in its original implausible form of direct communication with a familiar mundane personality, but as an extension of a theory of interpersonal phenomena suggested by findings in ESP" (pp. 139-140).

J. L. WOODRUFF

The City College of New York

HUMAN PERSONALITY AND ITS SURVIVAL OF BODILY DEATH. By Frederic W. H. Myers with an Introduction by Gardner Murphy. New Edition. Two Volumes. Pp., Vol. 1, XLVI+700; Vol. II, XX+660. Longmans, Green and Co., printed by arrangement with Garrett Publications, New York, 1954. $15.

This new edition of Frederic Myers' monumental work is an event in the literature of psychical research the importance of which can hardly be overestimated. Originally published in 1903, the last previous reprint in 1939 has long been exhausted to the inconvenience of countless students. For these are volumes to have at hand for constant reference, not to borrow for casual reading, volumes that assemble the vast achievements of psychical research at the turn of the century and laid the groundwork for the more compelling survival evidence obtained in the decades following Myers' death in 1901. That Myers himself, after his Herculean labors, became convinced of the reality of a spiritual world and its interaction with this world is, of course, common knowledge.

The Introduction by Dr. Gardner Murphy to this new edition not only surveys Myers' great achievements in their historical setting, but also informs the student *how* to read these volumes in order to understand their documentary strength and philosophical significance. "Myers," says Dr. Murphy, "is the great central classic of psychical research and should be taken in no other sense," but it would be entirely alien to Myers' own spirit "to freeze psychical research as of the moment of his own death." Dr. Murphy then points out the

changes in psychical research in the decades following Myers' death and the "extraordinary development, especially after the work of J. B. Rhine in 1934, of better experimental methods for the demonstration and psychological analysis of telepathy, clairvoyance, and other paranormal processes."

A few passages from Dr. Murphy's Introduction are quoted here:

> "Myers felt with very great moral intensity that the universe could be understood only through the mobilization of organized intelligence; that the fundamental issues as to the place of man in the universe could be resolved only through answering basic questions about the nature of human personality. The great question, he thought, was this: 'Is the universe friendly?' An answer to such a question, he believed, must inevitably depend to some degree on the question whether man has some sort of continuity beyond the grave, in which all that has been achieved in life can be expanded and more adequately fulfilled in a larger time span. Consequently, for Myers, the question of survival beyond death was of primary importance in developing a reasonable philosophy of life. It seemed to him, moreover, that the new experimental approaches, the spirit of science working throughout the investigation of alleged psychic phenomena, might reveal not only the likelihood of human survival, but also the nature of those processes shown day by day in human living which express man's higher nature."
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> "The two major achievements of Myers' life can easily be stated. One was his active investigation of 'the communication of impressions of any kind from one mind to another independently of the recognized channels of sense,' a process to which he gave the name telepathy. . . . At the same time, he was likewise a theorist of the first rank. He early became convinced of the enormous importance of the concepts just coming over the horizon relating to the subconscious or unconscious realities in man's mental life. In point of fact, he was the first in the English-speaking world to describe systematically the phenomena of subconsciousness or unconsciousness to which he gave the name *subliminal* (beneath the threshold). He wrote extensively and brilliantly about 'the subliminal self.' He showed that works of genius, for example, could often be understood as 'the subliminal uprush' of rich storehouses of information, sentiment and reflection which were not at the time in the consciousness of the creative thinker, but which like a geyser broke into consciousness in a creative act."
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> "Investigator on the one hand, theorist on the other hand, in touch with the medicine, the psychology, the philosophy, of

his own day and of the Western European tradition, he was ready for a monumental synthesis in which the authenticated facts regarding telepathy, apparitions, contact with the future, and apparent communications through mediums and automatic writers indicating the continuity beyond the grave, could all be brought into a system."

* * *

"We present . . . this new edition of the complete Myers, not as a contemporary picture of psychical research, but rather as a great definition and documentation of an area which insistently battles its way into recognition among the sciences. The time for such recognition has not yet come, but a great step toward such an achievement was taken in the writing of the monumental work which the reader has now before him."

William James in his brilliant book, *The Varieties of Religious Experience,* published the year before *Human Personality* appeared, recognized the far-reaching importance to psychology of Myers' conception of the subliminal self. Myers' work was an immediate success, the first edition being exhausted in a fortnight. This widespread interest was a landmark in advancing the new science of psychical research. Illuminating reviews of *Human Personality* by several of Myers' distinguished contemporaries, including William James, Sir Oliver Lodge, Th. Flournoy, and Walter Leaf may be found in S.P.R. *Proceedings* (Vol. XVIII, 1903-4, pp. 1-61).

L.W.A.

APPARITIONS. By G.N.M. Tyrrell with a Preface by H. H. Price. Revised Edition. Pp. 172. Pantheon Books, New York, 1953. $3.00.

This reissue of what is generally regarded as the late Mr. Tyrrell's most important contribution to psychical research is now available in an American edition. Particulars of the reissue, which first appeared in England, were reported in this JOURNAL in April, 1954. None of our members, or indeed anyone interested in psychical research, can afford to miss reading Tyrrell's penetrating examination of sixty-one well-authenticated apparitional cases which, with few exceptions, are drawn from *Phantasms of the Living, Human Personality,* and S.P.R. *Proceedings* and *Journals.* After describing and classifying the cases and noting their common characteristics, Tyrrell proposes a tentative theory of their causation.

Professor H. H. Price, of Oxford University, has written an admirable Preface to the book in which he outlines Tyrrell's main argument.

## HISTORY OF THE SOCIETY

The First American Society for Psychical Research was formed in 1885, in consequence of a visit by Sir W. F. Barrett to this country, and Prof. Simon Newcomb became its President. In 1887 the Society invited a man of signal ability, Richard Hodgson, A.M., LL.D., sometime Lecturer in the University of Cambridge, to become its Executive Secretary, and he accepted.

This organization later became a branch of the English Society under the very able guidance of Dr. Hodgson until his death in 1905. The American Society for Psychical Research was then re-established with James H. Hyslop, Ph.D., formerly Professor of Logic and Ethics in Columbia University, as its Secretary and Director.

## THE ENDOWMENT

The American Society for Psychical Research, Inc., was originally incorporated under the Laws of New York in 1904 under the name of American Institute for Scientific Research, for the purpose of carrying on and endowing investigation in the fields of psychical research and psychotherapeutics. It is supported by contributions from its members and a small endowment fund. The income of the Society pays only for the publications and office expenses, but does not enable the Society to carry on its scientific investigations. A much greater fund is required before this work can be carried forward with the initiative and energy which its importance deserves.

The endowment funds are dedicated strictly to the uses set forth in the deed of gift and are under control of the Board of Trustees, the character and qualifications of whom are safeguarded, as with other scientific institutions.

Moneys and property dedicated by will or gift to the purposes of the American Society for Psychical Research, Inc., whether to the uses of psychical research or psychotherapeutics, are earnestly solicited. The form which such dedication should take when made by will is indicated in the following:

"I give, devise and bequeath to the American Society for Psychical Research, Inc., a corporation organized under the laws of the State of New York, the sum of ..... dollars (or if the bequest is real estate, or other specific items of property, these should be sufficiently described for identification), in trust for the corporate purposes of said Society."